Gifted Education Program Evaluation

OPI

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Foreword

This publication has been prepared to assist districts with the evaluation of their program of services for gifted and talented (high ability/high potential) students as required by accreditation standard 10.55.804 and Montana State Law 20-7-901-904. The Office of Public Instruction, along with the Montana Association of Gifted and Talented Education (Montana AGATE), the author Constance Smith, and editors Alicia Moe and Michael Hall have provided this publication as part of the series of research-based, best practice publications included in the Gifted Education Resource Manual for Montana schools.

Chapter 1

Philosophy

Program evaluation is a form of disciplined inquiry, the purpose of which is to produce information to assist in making informed value judgments about a program (Carolyn Callahan, 1992) for the purpose of improving the program under evaluation (James Borland, 1989). It provides an organized way to gather, analyze, and report information to multiple audiences. Evaluation results can be used to:

- document the need for the program,
- document the case for a particular approach,
- document the feasibility of implementing the program,
- document the fact that the program is being implemented,
- assist in the identification of program strengths/weaknesses,
- generate information to assist in making in-progress revisions of the program, and
- document results/impact of the program on the school-wide community.
        (OPI Gifted Education Resource Manual, 1994, Revised 2001)

1nherent in the evaluation process is the potential for change and growth.

Planning for effective program evaluation reflects a district's priority for creating and maintaining quality programs and services for children. The benefits that come from the time, personnel, and financial resources directed towards this priority can include program improvement and evolvement, program accountability and support, and positive staff and community relations.

For more information on program evaluation philosophy:

Borland, J. H. 1989. *Planning And Implementing Programs For The Gifted.* New York: Teachers College Press.

Callahan, C.M. 1992. *Evaluation Lectures.* Helena, MT: Project EDGE, Office of Public Instruction.

Fetterman, D.M. 1993. *Evaluate Yourself (Report No. 9304).* Storrs, CT: The National Research Center on the Gifted and Talented.

Hunsaker, S.L. & Callahan, C.M. 1993. "Evaluation of Gifted Programs: Current Practices." *Journal for the Education of the Gifted,* 16 (2), 190-200.

Montana Office of Public Instruction. 1994, Revised 2001. *Gifted Education Resource Guide.* Helena, MT.

Chapter 2

Unique Evaluation Needs for Gifted Programs

The cognitive characteristics of gifted learners place them on different developmental trajectories and learning paths, creating unique needs and challenges for evaluating the programs that serve them. Appropriate quantitative and qualitative measurement instruments are essential to effective program evaluation.

Quantitative Measurement: While quantitative measurements are necessary to assess the outcomes of a program's impact on student growth and achievement, the application of such traditional methods as comparing pre-test and post-test gains, product reports, grades, and other quantifiable means may be inappropriate because they only confirm data that was initially collected about the students (Mathews & Burns, 1992; Renzulli & Smith, 1979).

Two obstacles-the *ceiling effect* and *regression to the mean*-make the use of grade-level standardized tests inappropriate for measuring the skills and knowledge that gifted students have acquired. The ceiling effect occurs when students "top out" the test (i.e., run out of challenging test items) before it fully measures what they know. Regression to the mean is the tendency of high scorers on a test to move to the middle score range when the test is retaken. Consequently, grade-level standardized tests are not an appropriate tool with which to evaluate the effectiveness of a gifted education program.

When standardized, norm-referenced tests are used to measure the effectiveness of a gifted program, out-of-level tests are more appropriate. Tests intended for advanced grade levels or normed for older students present gifted students with challenging items that can more adequately demonstrate the upper limits of the knowledge or skills they have acquired; these tests and/or norming scales have a broad enough range to show growth over time.

Qualitative Measurement: The goals of gifted programs are often holistic, complex, long-term, product-oriented, individualized, and not as conducive to measurement in traditional ways (Tomlinson, Bland, & Moon, 1993). An effective and appropriate qualitative evaluation instrument should match the goals for the program with

Unique goals of programs for gifted learners provide special challenges to evaluators.

questions designed to provide information about the goals, structures, and activities of the program. The resulting data will help in making program improvements or modifications (Tomlinson, Bland, & Moon, 1993).

For more information on critical needs for gifted program evaluation:

Mathews, F.N. & Burns, J.M. 1992. "A Parent Evaluation Of A Public Preschool Gifted Program." *Roeper Review,* 15 (2), 60-72.

Renzulli, J.S. & Smith, L.H. 1979. Issues And Procedures In Evaluating Programs, citing A.H. Passow (Ed.), *"The Gifted And The Talented: Their Education And Development,"* (pp. 289-307). Chicago, IL: Univerity of Chicago Press. Tomlinson, C. Bland, L., & Moon, T. 1993.

"Evaluation Utilization: A Review Of The Literature With Implications For Gifted Education." *Journal for the Education of the Gifted,* 16 (2), 171-189.

Chapter 3

Stage One of Effective Program Evaluation: Planning for the Evaluation

Planning for program evaluation can take place during the early stages of designing a program, during program development, or during program modification and renewal. Questions to consider at this stage:

- What are the key components of the program?
- What is the focus of the program?
- What questions do stakeholders want answered?

Programs in the developmental stages lend themselves to formative evaluation methods, such as self-examination by a program coordinator or a broad-based steering committee. This provides participants with constant monitoring and questioning relative to what they are trying to accomplish and the degree to which they are successful. An external evaluator or evaluation team more appropriately conducts summative evaluation of established programs. Independent evaluations can add objectivity, validity, reliability, and fresh perspectives to the review and resulting recommendations. Independent evaluations also serve to strengthen support from policy makers and community members (Fetterman, 1993).

A well thought out plan is essential to effective program evaluation.

When determining the scope of the evaluation, it is important to focus on a manageable number of program-related goals (OPI, Program Assessment: Six Step Process for Curriculum Improvement, 1990).   A first step is to prioritize the areas most in need of attention, taking into account the purpose of the evaluation, feasibility, personnel, and resources available for the task. In the case of established programs, selected components can be targeted for comprehensive evaluation during planned evaluation cycles for the total program. Whether the scope is formative or summative, the evaluation plan must include key components, identified questions, and a work plan.

Key Components: The key components for programs providing services for high ability students include:

- Identification Process
- Program Development/Management
- Differentiated Curriculum Programming Options
- Instruction
- Professional Development
- Parent Involvement
- Evaluation

Writing clear goals and measurable objectives for each component at the early stages of program development will create a proper roadmap to assist in future evaluation (Tomlinson & Callahan, 1993). It will also provide the school district with options for conducting in depth evaluations of specific components or the summative evaluation of an entire program.

Identified Questions: Audiences directly or indirectly involved with the gifted program need an opportunity to raise questions that need to be addressed. Renzulli (1975) suggests using questionnaires or interviews to gather this information from stakeholders, such as parents, teachers, administrators, and students. Evaluation questions that emerge from this process must be written to gather information about the components, goals, and activities of the program that will be helpful in making improvements (Tomlinson, Bland, & Moon, 1993).

How a question is asked will affect the response and usefulness of the data.

How a question is asked will affect the response and usefulness of the data. Evaluation questions that are typically short and phrased in terms of test score gains (Callahan, 1986) need to be restated to align with programs that are product-oriented, individualized, holistic, and long-term in nature. One way to write questions that more accurately reflect gifted program goals is to reframe traditional "yes/no response" questions to open-ended questions designed to elicit more detailed and varied responses.

<u>*The Workplan:*</u> A well-designed plan is essential to effective program evaluation. Evaluators should ensure four key areas are addressed in the evaluation work plan. These are:

- Identifying needs and options
- Involving key stakeholders
- Determining the financial resources
- Developing procedures for conducting the evaluation

Identifying needs and options considers the scope and focus of the evaluation as well as the options available for conducting the program evaluation. Questions evaluators may ask include:

- Is this a formative or summative evaluation?
- What components need assessment?
- What components are missing or incomplete?
- What areas need improvement or are cause for concern?
- What areas need to expand or evolve?
- Is the program in compliance with Montana State Law?
- To what degree are we meeting the educational needs of high ability learners?

Once the needs are identified, possible options or approaches to conducting the program evaluation must be considered including use of a *criteria checklist* (*ex.* Criteria for Excellent Programs for Gifted and Talented Students: A Gifted and Talented Program Guide, Office of Public Instruction, 1994), conducting a *needs assessment,* and

<u>The Workplan:</u> *A well-designed plan is essential to effective program evaluation.*

collecting *broad-based data* (see *"Definitions for Program Evaluation Options"* in Appendix A). Choosing the most efficient and effective option for the particular task depends on the scope of the evaluation as well as time, money, and the expertise of the people involved.

Involving key stakeholders early in the evaluation process is critical. The group should include those people who have an interest in the community's education system in general and those who have a specific interest in the education of gifted learners. Having knowledge in gifted education as well as in both qualitative and quantitative evaluation will enhance the quality and effectiveness of the evaluation results (Tomlinson, Callahan, 1993). Key stakeholders may represent the following groups:

- school board members
- community/business leaders
- classroom teachers
- gifted program specialists
- school administrators
- students
- parents

*Involving key stakehold-
ers early in the evalua-
tion process is critical.*

A representative from each key stakeholder group can be selected to form an Evaluation Steering Committee. Their duties might include: determining evaluation needs; describing the boundaries of the evaluation; monitoring and assessing the evaluation process; reviewing evaluation results and recommendations; and facilitating action plans from recommendations.

Determining the financial resources available for the evaluation sets the parameters for the scope, personnel, and procedures that will be followed. A school district's degree of commitment to program evaluation can be reflected in its commitment to providing time and personnel for effective evaluation. When financial provisions are adequate to the task, data collection and analysis will be adequate to ensure usefulness of the evaluation findings (Tomlinson, Callahan, 1993).

Procedures for Conducting the Evaluation must include clearly defined roles for evaluation participants, timelines for gathering data and disseminating results, ways to monitor the evaluation process, and action plan ideas for implementing recommendations.

For more information on evaluation planning:

Boyd, L. 1992. "The Needs Assessment-Who Needs It?" *Roeper Review,* 15 (2), 64-66. Feldhusen, J., Van Tassel-Baska, J., Seeley, K. (1989).

Callahan, C.M. 1986. "Issues In Evaluation Of Programs For The Gifted." *Gifted Child Quarterly,* 27, 3-7.

Evaluate Yourself (Report No. 9304). Storrs, CT: The National Research Center on the Gifted and Talented.

Excellence In Educating The Gifted. Denver, CO: Love Publishing Company. Fetterman, D.M. (1993).

Montana Office of Public Instruction. 1994. *Criteria For Excellent Programs For Highly Capable Students: A Gifted And Talented Students' Program Guide.* Helena, MT.

Montana Office of Public Instruction. 1990. *Program Assessment: A Six-Step Process To Curriculum Improvement.* Helena, MT.

Renzulli, J.S. (1975). *Working Draft: A Guidebook For Evaluating Programs For Gifted And Talented.* Ventura, California: Office of the Ventura County Superintendent of Schools.

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Tomlinson, C.A. & Callahan, C.M. 1993. "Planning Effective Evaluations For The Gifted." *Roeper Review,* 17, (1), 46-51.

Chapter 4

Stage Two of Effective Program Evaluation: Designing Data Collection & Analysis

One of the most critical aspects of developing a program evaluation for gifted education is to carefully match evaluation goals and questions with the data collection modes capable of demonstrating both student growth and how the program functions (Tomlinson & Callahan, 1993).   Questions to consider at this stage:

- Are there plans to use multiple data sources?
- Are there plans to employ varied collection modes?
- Have ways been examined to collect outcome data?
- Have ways been examined to collect process data?

Review of promising evaluation practices that use multiple data sources and a variety of data gathering modes is essential to the process—particularly if the intent is to produce policy development and program improvement (Hunsaker & Callahan, 1993).

Obstacles present in the evaluation of gifted programs can be overcome through careful planning and close attention to these key considerations:

- Ensure evaluators are trustworthy and knowledgeable of both gifted education and evaluation,

- Clearly identify all audiences having an interest in or need for evaluation results and involve them in the evaluation process, and

- Use a variety of data gathering methods designed to reflect the unique structure and goals of programs for gifted learners (e.g., out-of-level testing, portfolio assessment, product rating with demonstrated inter-rater reliability, etc.).

For a complete list, see *"Suggestions for Overcoming Obstacles"* in Appendix B.

It is critical to match evaluation goals and questions with the data collection methods capable of demonstrating student growth and how the program functions.

Data Collection Modes: Evaluations should not rely heavily on one kind of data collection or data isolated from other categories as this may distort or skew the findings. Most experts recommend using a variety of data gathering modes to create a *data source bank,* which should include standardized tests, self-constructed tests, student portfolios, rating scales, questionnaires (see Appendix C), interviews, and observations. Once this data bank is established, it becomes an ongoing resource for evaluations.

Instruments selected for evaluation purposes must demonstrate validity (measuring what they purport to measure) and reliability (yielding similar results when administered more than once to an individual or group). While evaluators usually consider standardized tests to be both valid and reliable, when selecting them as an evaluation instrument, they must take into consideration the match between program and instrument content. Consider the cost and availability, the ease of administration, scoring and interpretation, the training level required for administration, the instrument's reliability and validity, the ceiling, and the type of scores provided (Indiana State Department of Education, 1990). Tests must also be sensitive to cultural, ethnic, economic, and gender bias.

Outcome and Process Data are both included in multiple data collection. *Outcome data* can demonstrate whether students' affective and/or academic growth has occurred as a result of program participation or intervention. Ways to collect outcome data may include comparing aptitude and achievement results of eligible program participants and eligible program non-participants; using out-of-level achievement data with program participants; using comparison groups; using portfolio/product ratings according to predetermined criteria by experts with demonstrated inter-rater reliability; using traditional experimental or quasi-experimental designs with control and treatment groups; and using valid and reliable self-concept inventories with control and treatment groups and/or as pre and post data for a single group (Tomlinson & Callahan, 1993) .

Process data provides information regarding the nature of a program and whether the program is functioning according to the plan. The variety of sources available for collecting process data include: attendance records; documents (agendas, minutes, handouts, newsletters) from staff in-services, advisory meetings, district meetings, and parent gatherings; communications (home and school, regular class and G/T class); planning documents and lesson plans; observation checklists for classroom environment; and values data (interview, surveys, etc.).

Evaluation Designs: The procedures and conditions used to collect information and data are referred to as the Evaluation Design. In order to make evaluation findings useful, it is imperative evaluators select an evaluation design appropriate to the focus and context (Tomlinson, Bland, & Moon, 1993). The design selected must assist the evaluators in answering the questions generated from the program goals and objectives.

Quantitative experimental designs, such as the one-group pretest/posttest design, are useful when addressing causal questions, a narrow range of program variables, and/or evaluating an established program (OPI, Program Assessment: A Six-Step Process for Curriculum Improvement, 1990).

Qualitative non-experimental designs are useful when addressing a broad range of questions and/or evaluating a developing program. They are well suited for examining program process and establishing areas for further study. By describing the context in which the program is operating, qualitative approaches aid in making program modifications that enhance student outcomes.   Gifted programs are particularly amenable to the use of qualitative approaches, in that creative approaches to teaching can be described and documented (Fetterman, 1993).

The strongest evaluation designs consist of both experimental and non-experimental methods, allowing evaluators to use quantitative (number-based) and qualitative (description-based) approaches to analyzing information.

The strongest evaluation design consists of both experimental and non-experimental methods.

For more information on data collection and evaluation design:

Callahan, C.M. 1986. "Asking The Right Questions: The Central Issue In Evaluating Programs For The Gifted And Talented." *Gifted Child Quarterly,* 30 (1), 38-42.

Carter, C. M. 1992. "Evaluation Design: Issues Confronting Evaluators Of Gifted Programs." *Gifted Child Quarterly,* 30 (2) 88-92.

Fetterman, D.M. 1993. *Evaluate Yourself (Report No. 9304).* Storrs, CT: The National Research Center on the Gifted and Talented.

Hadaway, N. & Marek-Schroer, M.F. 1992. "Multidimensional Assessment Of The Gifted Minority Student." *Roeper Review,* 15 (2), 73-77.

Hunsaker, S.L. & Callahan, C.M. 1993. "Evaluation Of Gifted Programs: Current Practices." *Journal for the Education of the Gifted,* 16 (2), 190-200.

Indiana State Department of Education. 1990. *The Indiana Guide For The Identification Of Gifted/Talented Students.* Indianapolis, IN.

Montana Office of Public Instruction. 1990. *Program Assessment: A Six-Step Process To Curriculum Improvement.* Helena, MT.

Tomlinson, C.A. , & Callahan, C.M. 1993. "Planning Effective Evaluations For The Gifted." *Roeper Review,* 17 (1), 46-51.

Tomlinson, C., Bland, L. & Moon, T. (1993). "Evaluation Utilization: A Review Of The Literature With Implications For Gifted Education." *Journal for the Education of the Gifted,* 16 (2), 171-189.

Chapter 5

Stage Three of Effective Program Evaluation: Conducting the Evaluation

Once the process of evaluation is underway, the steering committee should ensure that the appropriate participants are involved in the process, the necessary data is being collected, and data analysis is proceeding according to the workplan (Tomlinson & Callahan, 1993). Questions to consider at this stage are:

- Is the evaluation proceeding as planned?
- Are any gaps in planning now evident?
- What adjustments are called for in the remainder of the evaluation?
- What is the timeline for data analysis and feedback?
- What is the plan for using findings for positive program change?
- What is the plan for converting findings into an action plan?

After appropriate instruments have been selected for the evaluation, participants can proceed with gathering information in a variety of forms. It is valuable at this point to have opportunities available for monitoring the process to allow necessary modifications to be made and data to be collected in a timely manner.

Once collected, data must be reviewed and interpreted for results. Quantitative data must be examined using statistical analysis while qualitative data must be analyzed for patterns and themes. The needs of the audiences to whom the information will be presented must be considered when plans are made for summarizing the results. For most decision makers, the use of analyses involving easy-to-read indices (e.g., percentages, arithmetic averages, and/or easily understood data-representation schemes such as bar graphs) is practical and appropriate (OPI, Program Assessment: A Six-Step Process to Curriculum Improvement, 1990).

For more information about conducting evaluations:

Montana Office of Public Instruction. 1990. *Program Assessment: A Six-Step Process To Curriculum Improvement.* Helena, MT.

Continued involvement of evaluators and steering committee members is necessary to ensure appropriate management of data and the evaluation process.

Silky, W. & Readling, J. 1992. "Redsil: A Forth Generation Evaluation Model For Gifted Education Programs." *Roeper Review,* 15 (2), 67-69.

Tomlinson, C.A. & Callahan, C.M. 1993. "Planning Effective Evaluations For The Gifted." *Roeper Review,* 17 (1), 46-51.

Chapter 6

Stage Four of Effective Program Evaluation: Reporting Findings and Follow Up

Appropriate forms of evaluation results must be available to the different groups and stakeholders involved in the program. At this stage, it is important to plan for preparation and release of findings, follow-up action on the findings, and to look ahead to the next evaluation cycle (Tomlinson & Callahan, 1993). Questions to consider are:

- What do findings say about future directions of services for gifted learners?
- What program successes did the evaluation spotlight?
- Who needs to know about them?
- What program changes are indicated by evaluation results?
- What are the impacts of these changes?
- How will the varied stakeholders view findings?

Discussions of evaluation results need to be accompanied by recommendations for program modifications. To ensure the findings are translated into action, action plans should be developed with goals targeted, tasks outlined, timelines established, and budgets developed.

Evaluation reports need to be presented in an easy to understand format that suits the needs of the different groups and decision makers. Summaries should be free of jargon and technical interpretation of data. Data representations should be made in table and graphic forms.

When presenting the results of the evaluation, select presenters that are likely to be listened to by the target audience. Business leaders or community members can be viewed as strong advocates by board members; gifted students who have served on the committee can be powerful spokespersons for their own needs (Tomlinson & Callahan, 1993).

Evaluation is a continuous process. As one cycle of evaluation is completed, new insights and questions emerge for the next.

Keep a *Program Evaluation Portfolio* during the evaluation process. It may contain examples of evaluation designs, selected/created instruments, data resource banks, committee agendas/minutes, evaluator resources, best practices research, and final reports and recommendations. This program profile can strengthen future assessments by maintaining examples of useful practices and strategies, and provide information that can be a springboard to the next area for evaluation.

For more information about report findings and follow-up:

Tomlinson, C.A. & Callahan, C.M. 1993. "Planning Effective Evaluations For The Gifted." *Roeper Review,* 17 (1), 46-51.

Evaluation portfolios document the evaluation design and methods and serve to strengthen future evaluations.

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Avery, L. & Van Tassel-Baska, J. (1997). "Making Evaluation Work: One School District's Experience." *Gifted Child Quarterly,* 41 (4), 124-132.

Borland, J. H. (1989). *Planning And Implementing Programs For The Gifted.* New York: Teachers College Press.

Boyd, L. (1992). "The Needs Assessment-Who Needs It?" *Roeper Review,* 15 (2), 64-66.

Callahan, C.M. (1983). "Issues In Evaluation Programs For The Gifted." *Gifted Child Quarterly,* 27, 3-7.

Callahan, C.M. (1986). "Asking The Right Questions: The Central Issue In Evaluating Programs For The Gifted And Talented." *Gifted Child Quarterly,* 30 (1), 38-42.

Callahan, C.M. (1992). *Evaluation Lectures.* Helena, MT: Project EDGE, Montana Office of Public Instruction.

Carter, K.R. (1986). "Evaluation Design: Issues Confronting Evaluators Of Gifted Programs." *Gifted Child Quarterly,* 30 (2) 88-92.

Carter, K.R. & Hamilton, W. (1985). Formative Evaluation Of Gifted Programs: A Process And Model. *Gifted Child Quarterly,* 29 (1), 5-11.

Feldhusen, J., Van Tassel-Baska, J., & Seeley, K. (1989). *Excellence In Educating The Gifted.* Denver, CO: Love Publishing Company.

Fetterman, D.M. (1993). *Evaluate Yourself (Report No. 9304).* Storrs, CT: The National Research Center on the Gifted and Talented.

Hadaway, N. & Marek-Schroer, M.F. (1992). "Multidimensional Assessment of the Gifted Minority Student." *Roeper Review,* 15 (2), 73-77.

Hunsaker, S.L. & Callahan, C.M. (1993). "Evaluation Of Gifted Programs: Current Practices." *Journal for the Education of the Gifted,* 16 (2), 190-200.

Indiana State Department of Education. (1990). *The Indiana Guide For The Identification Of Gifted/Talented Students.* Indianapolis, IN.

Johnsen, S. (1995). *Evaluation Of Gifted And Talented Programs.* Austin, TX: Presentation for the Texas Association for the Gifted and Talented.

Mathews, F.N. & Burns, J.M. (1992). "A Parent Evaluation Of A Public Preschool Gifted Program." *Roeper Review,* 15 (2), 60-72.

Montana Office of Public Instruction. (1994). *Criteria For Excellent Programs For Highly Capable Students: A Gifted And Talented Students' Program Guide.* Helena, MT.

Montana Office of Public Instruction. (1994). *Gifted Education Resource Guide.* Helena, MT.

Montana Office of Public Instruction. (1990). *Program Assessment: A Six-Step Process To Curriculum Improvement.* Helena, MT.

Renzulli, J.S. & Smith, L.H. (1979). *Issues And Procedures In Evaluating Programs.* In A.H. Passow (Ed.), *The Gifted And The Talented: Their Education And Development* (pp.289-307). Chicago, IL: University of Chicago Press.

Renzulli, J.S. (1975). *Working Draft: A Guidebook For Evaluating Programs For The Gifted And Talented.* Ventura, California: Office of the Ventura County Superintendent of Schools.

Silky, W. & Readling, J. (1992). "Redsil: A Fourth Generation Evaluation Model For Gifted Education Programs." *Roeper Review,* 15 (2), 67-69.

Tomlinson, C.A. & Callahan, C.M. (1993). "Planning Effective Evaluations For The Gifted." *Roeper Review,* 17 (1), 46-51.

Tomlinson, C., Bland, L. & Moon, T. (1993). "Evaluation Utilization: A Review Of The Literature With Implications For Gifted Education." *Journal for the Education of the Gifted,* 16 (2), 171-189.

Appendix A

Definitions for Program Evaluation Options

A Criteria Checklist includes statements that are developed for each component of the program and often functions as the basis for program review by a self-study committee. The viewpoints of committee members will contribute to a broader, more complete picture of the program. For detailed criteria checklists see, *Criteria for Excellent Programs for Gifted and Talented Students: Gifted Education Resource Guide,* Office of Public Instruction, 1994, Revised 2001.

A Needs Assessment can be used as the foundation for program development and program evaluation. This approach is directly linked to knowing what gifted students need and how these needs are being met in the gifted program and to what degree (Feldhusen, Van Tassel-Baska, Seely, 1989). Most experts in the field recommend some form of training or professional development precede a needs assessment so that it reflects informed choices about gifted programs. Questionnaires or surveys can be designed for specific groups of stakeholders to reflect their point of view about components and functions of a quality program. For a detailed outline for developing a *Needs Assessment* and a sample *Needs Assessment* survey, refer to the appendices of the Gifted Education Resource Guide, Office of Public Instruction, 1994, Revised 2001, and Appendix C of this document.

A Needs Assessment can be used as the foundation for program development and program evaluation.

Broad Based Data Collection is designed to gather a wide range of information using a variety of resources to respond to questions that have emerged from the initial evaluation planning stage. These questions guide evaluators to the most appropriate types of data and strategies needed to conduct the evaluation.

Appendix B

Suggestions For Overcoming Obstacles

- Make evaluation procedures part of planning from the earliest stages of program development (including clear program descriptions and goals), and plan for the use of evaluation findings.

- Ensure evaluators are trustworthy and knowledgeable of both gifted education and evaluation.

- Provide adequate funding and time for appropriate evaluation procedures to be followed.

- Clearly identify all audiences who have an interest in or need for evaluation results and involve them in the evaluation process.

- Ask evaluation questions which are well focused to provide information about the goals, structures, and activities of the program being evaluated-questions which will aid in making significant program modifications.

- Use multiple data sources (e.g., teachers, parents, students, administrators, and school board members) to understand the values of varied groups of stakeholders.

- Develop evaluation designs which address complex issues of measurement (including qualitative strategies, and quantitative methods such as time-series design, using students as their own controls, retrospective pretesting, etc.).

- Avoid reliance on traditional standardized measures which offer little promise of reflecting academic growth in gifted learners.

- Use a variety of data gathering methods designed to reflect the unique structure and goals of programs for gifted learners (e.g., out-of-level testing, portfolio assessment, product rating with demonstrated inter-rater reliability, etc.).

Make evaluation procedures part of planning from the earliest stages of program development

- Describe procedures for data collection and interpretation so that audiences understand processes which were followed and conclusions which were drawn.

- Disseminate reports, which are timely and designed to encourage follow-through, to all appropriate audiences.
  .

Excerpted from:

"Evaluation Utilization: A Review of the Literature with Implications for Gifted Education," Carol Tomlinson, Lori Bland, & Tonya Moon. *Journal for the Education of the Gifted,* 1993.

Use a variety of data gathering methods designed to reflect the unique structures and goals of programs for gifted learners.

Appendix C

Sample TAG (Talented & Gifted) Evaluation Questions

(Adapted from the Round Rock ISD Program)

1.0 Is the program management effective and efficient?

    1.1   Are all the state compliance standards met?

    1.2   Are all responsibilities delineated?

    1.3   Are philosophy, definition, goals, and objectives present?

    1.4   Is a long-range plan or time line in place?

    1.5   Is the program board approved?

    1.6   Does the school district select, maintain, and support TAG teachers whose qualities match their delineated responsibilities?

    1.7   Is budget adequate in providing human and material resources?

2.0 Is the identification procedure effective and efficient?

    2.1   Are all the state compliance standards met?

    2.2   Is the procedure statistically sound?

    2.3   Do identified measures match the program definition?

    2.4   Do identified students match the program definition?

    2.5   Do identified students match the total school population?

    2.6   Do identified students benefit from the program?

3.0 Are students receiving an effective differentiated instruction?

    3.1   Are all state compliance standards being met?

Promising evaluation practices utilize data from multiple sources.

3.2 Does the scope and sequence define content, processes, and themes?

    3.3   Are teachers using the TAG curriculum? instructional strategies?

    3.4   Does the TAG classroom meet basic district requirements? individualization?

    3.5   Are adequate opportunities available to students such as mentorships, community projects, concurrent and/or early college enrollment?

4.0 Is the program effectively and efficiently coordinated?

    4.1   Are all the state compliance standards met?

    4.2   Does the program serve students in kindergarten through twelfth grade?

Writing clear goals and measurable objectives for each component at the early stages of program development will create a proper road map to assist in future evaluation.
(Tomlinson & Callahan, 1998)

    4.3   Do TAG teachers communicate effectively with regular teachers?

    4.4   Do TAG teachers work effectively with one another?

    4.5   Are other teachers, administrators adequately informed about the TAG program?

    4.6   Are regular teachers adequately trained about the TAG program?

5.0 Does the program efficiently and effectively communicate with external audiences?

    5.1   Are all state compliance standards met?

    5.2   Are appropriate external audiences identified?

    5.3   Have handbooks, brochures, and media presentations been developed?

    5.4   Does the program communicate with parents?

    5.5   Are the parents involved in the program (how and which ones?)

    5.6   Are other relevant external audiences aware of relevant aspects of the program?

Developed by: Dr. Carolyn M. Callahan
                    Foundations of Education
                    University of Virginia

Major Questions for Component 3.0

Differentiated Instruction

3.0   Differentiated Instruction

3.1   Is instruction consistent with the stated philosophy, goals, and procedures of the Enrichment Triad Model?

3.1.1   Do the activities in the program allow for the pursuit of individual interests? (p. 5 of the Enrichment Triad Model)

3.1.2   Do the activities in the program reflect consideration of the learning style of each student? (p. 5 of the Enrichment Triad Model)

3.1.3   Do the activities in the program expand the students' interests? (p. 13 of the Enrichment Triad Model)

3.1.4   Do the students pursue the study of real problems as producers rather than consumers of knowledge? (p. 10 of the Enrichment Triad Model)

Audiences directly or indirectly involved with the gifted program need an opportunity to raise questions that need to be addressed.

3.1.5   Do the students learn and/or use the necessary methodological and investigative skills necessary for working on their problems? (p. 10 of the Enrichment Triad Model)

3.1.6   Do the students identify the appropriate outlets for their products? (p. 50 of the Enrichment Triad Model)

3.1.7   Do the activities reflect the use of raw data? (pp. 60-62 of the Enrichment Triad Model)

3.1.8   Do the students develop the following specific thinking skills: research skills; the investigative skills of collecting and organizing data, classifying, hypothesizing; evaluating; observing; criticizing; interpreting, and self-evaluating?

3.2   Does the program produce positive student attitudes toward the program, toward school and toward self?

    3.2.1   Does the instructional program result in the maintenance of positive attitudes toward school, self and program among those students who enter the program with positive attitudes toward school and self?

    3.2.2   Does the instructional program result in the improvement of attitudes toward school in the underachieving gifted or those students who enter the program with a poor attitude toward school?

    3.2.3   Does the instructional program result in the improvement of self concept in those students who enter the program with low self concepts?

    3.2.4   Do underachieving students demonstrate positive attitudes toward school?

3.3   Does the program produce positive student changes in the underachiever in the regular classroom?

    3.3.1   Will the underachievers exhibit more motivation to learn while in the regular classroom?

    3.3.2   Will the underachievers exhibit increased achievement as measured by teacher grades?

3.4   Do the students continue to master the basic competencies of the regular curriculum? (p. 15 of the Enrichment Triad Model)

    3.4.1   Do the academically achieving students continue to demonstrate the same rate of growth on a standardized test that they exhibited prior to inclusion in the program?

    3.4.2   Do the underachieving gifted demonstrate the same rate of achievement as an average student at the same grade level?

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Appendix D

Sample Evaluation Workplan for a Portion of a District Program

Identified Need: To evaluate the degree of curriculum differentiation occurring for our secondary students.

> **Evaluation Question:**
> To what degrees do secondary TAG teachers differentiate the curriculum for their students?

Key Stakeholders: high school students, parents, school board, high school teachers, school administrators, gifted education program specialist.

Financial Resources Available: $1,000

Timeline: Spring Semester

Procedures for Conducting the Evaluation:

> **Establish the Working Committee**
> **Refine Evaluation Question**
> **Define Information to Be Collected:**
> —Documents that identify curriculum requirements for secondary TAG students.
> —Past professional experiences, training, coursework, and degrees for each TAG teacher.
> —Data regarding the actual curriculum used in the TAG classroom.
> **Define Information Collection Strategies:**
> *Document Review:*
> —Secondary TAG curriculum
> —Lesson plans
> *Interviews:*
> —Student interviews
> —Teacher interviews
> *Observations:*
> —Observations of classroom
> *Develop Instruments:*
> —Surveys of teachers, students, parents
> **Assign Tasks**
> **Develop Detailed Timeline**
> **Conduct Interviews and D istribute Surveys**
> **Compile Data**
> **Analyze Data**
> **Draft Final Report**
> **Complete Report and Present Findings to the School Board**

Program evaluation is a form of disciplined inquiry, the purpose of which is to produce information to assist in making informed value judgments about a program. Carolyn Callahan, 1992